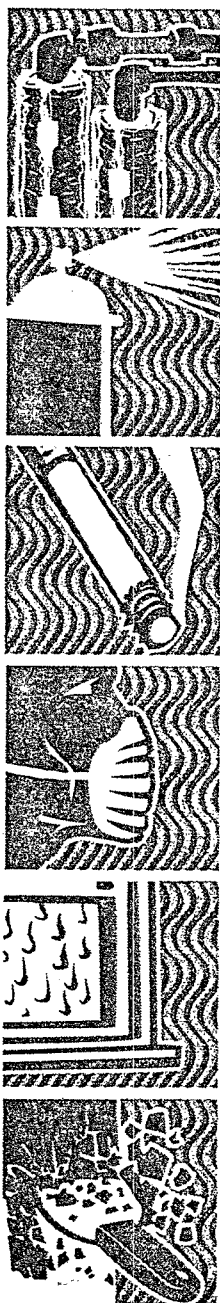


# Healthy Indoor Air for America's Homes



**Indoor  
Air  
Hazards  
Every  
Homeowner  
Should  
Know About...**

**I**f you're like most Americans, you spend much of your time indoors. Have you ever stopped to think about whether the air you're breathing at home is healthy? When you're at home do you frequently have headaches or feel nauseous or tired? Do you feel better when you leave the house? If you have these symptoms, or others listed in this booklet, your home's air quality may be the problem.

Research has found that in homes across America, the quality of indoor air can be worse than outdoor air. That's because many homes are being built and remodeled tighter — some with improved ventilation systems to provide fresh air exchange. We are using more products and furnishings containing compounds sensitive to some occupants.

You don't have to be a building scientist to deal with the quality of air in your home. However, you should understand a few basics to get you started. The "Healthy Indoor Air for America's Homes" project was developed to provide basic but comprehensive information to consumers to get a handle on indoor air quality.

A major hazard is MISINFORMATION. Be informed. Request more information by contacting the resources listed on the back of this booklet.

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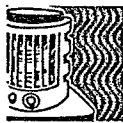
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# Indoor air hazards you should know about:



## **Moisture and biologicals (like molds, mildew and dust mites)**

Sources include excessive humidity levels, poorly-maintained humidifiers and air-conditioners, inadequate ventilation and animal dander.



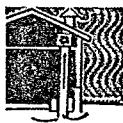
## **Combustion products including carbon monoxide**

Sources include unvented fossil-fuel space heaters, unvented gas stoves and ovens, and "backdrafting" from furnaces and water heaters.



## **Formaldehyde**

Sources include durable press drapes and other textiles, particle-board products such as cabinets and furniture framing, and adhesives.



## **Radon**

This is a radioactive gas from soil and rock beneath and around the foundation, ground water wells and some building materials.



## **Household products and furnishings**

These include volatile organic compounds from paints, solvents, air fresheners, hobby supplies, dry cleaned clothing, aerosol sprays, adhesives and fabric additives used in carpeting and furniture.



## **Asbestos**

Most homes more than 20 years old are likely to have asbestos. Sources include deteriorating, damaged or disturbed pipe insulation, fireproofing or acoustical material and floor tiles.



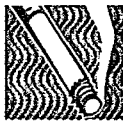
## **Lead**

Sources include lead-based paint dust from removing paint by sanding, scraping and burning.



## **Particulates**

Sources include particles from fireplaces, woodstoves, kerosene heaters, unvented gas space heaters, tobacco smoke, dust and pollen.



## **Environmental tobacco smoke**

Produces particulates, combustion products and formaldehyde.



## **Remodeling activities**

Remodeling can provide the disturbance that releases such materials as asbestos, lead, formaldehyde and other hazardous materials.

## Signs of possible home indoor air quality problems:

- unusual and noticeable odors, stale or stuffy air
- noticeable lack of air movement
- dirty or faulty central heating or air conditioning equipment
- damaged flue pipes or chimneys
- unvented combustion air sources for fossil fuel appliances
- excessive humidity
- tightly constructed or remodeled home
- presence of molds and mildew
- health reaction after remodeling, weatherizing, using new furniture, use of household or hobby products, or moving into a new home
- feeling noticeably healthier outside the home



## Molds, Excessive Moisture and Other Biological Pollutants

Molds, excessive moisture and other biological organisms can cause many undesirable health effects. To protect yourself and your family, read on.

### **Q: What biological problems should I be concerned about?**

A: Molds, mildew, fungi, bacteria and dust mites are some of the main biological pollutants inside the house. Some, such as pollen, are generated outside the home. Mold and mildew are generated in the home and release spores into the air. Mold, mildew, fungi and bacteria are often found in areas of the home that have high humidity levels, such as bathrooms, kitchens, laundry rooms or basements. Dust mites and animal dander are problematic when they become airborne during vacuuming, making beds or when textiles are disturbed.

### **Q: What are some of the health effects?**

A: Allergic reactions are the most common health problems associated with biological pollutants. Symptoms often include watery eyes, runny nose and sneezing, nasal congestion, itching, coughing, wheezing and difficulty breathing, headache, dizziness and fatigue. Dust mites have been identified as the single most important trigger for asthma attacks.

**Q: How are biological contaminants transported through the house?**

A: Molds and dust mites thrive in areas of high humidity. Mold grows on organic materials such as paper, textiles, grease, dirt and soap scum. Mold spores float throughout the house, forming new colonies where they land. Dust mites thrive on dead human skin cells and in textiles such as bedding, carpeting and upholstery. When these textiles are disturbed during vacuuming, making beds or walking on carpet, the dust particles become airborne. Pollen, plant material that enters through windows or on pets, and animal dander also become airborne when disturbed. Infectious diseases caused by bacteria and viruses are generally passed from person to person through physical contact, but some circulate through indoor ventilation systems.

**Q: If I'm concerned about the biological contaminants in my home, what can I do to deal with the problem?**

A: There are no practical tests for biological contaminants for use by non-professionals. However there are signs to watch for. You can sometimes see and smell mold colonies growing on surfaces. Mold growth should be suspected wherever there are water stains, standing water or moist surfaces. Prevent mold growth by keeping basements, bathrooms and other rooms clean and dry. Use a disinfectant to clean surfaces that have mold on them. If carpeting or furnishings become wet, they must be quickly and thoroughly dried or discarded.

Humidifiers, dehumidifiers and air conditioning condensing units should be regularly cleaned with a disinfectant such as chlorine bleach. Keep humidity at acceptable levels (less than 50 percent) and make sure there's plenty of ventilation, especially in areas where moisture tends to build up. People who are sensitive to dust mites may need to replace carpeting in their homes with hard surfaced flooring and use area rugs that can be removed and cleaned.

Vacuums with high efficiency filters or central vacuum systems can help reduce the airborne dust generated by vacuuming.



## Unhealthy Remodeling By-Products

You may not have realized that your remodeling project may be creating unhealthy household air.

**Q: What remodeling hazards should I be concerned about?**

A: Asbestos, formaldehyde and other organic solvents, and leaded paint dust are the main ones. These hazardous materials can be released into the air when you remove paint, hang cabinets or disturb other existing products that contain these materials. Paints, stripping and finishing products, and adhesives can also create indoor air pollution.

**Q: By remodeling with products that don't include these hazardous materials, won't that minimize my exposure?**

A: Not necessarily. Lead and asbestos were commonly used in home building until the late 1970s. Remodeling or attempting to remove these materials from a building can actually increase your risk of exposure. Often it's better to leave the lead- or asbestos-containing materials in place, but cover or seal them to reduce exposure. If you suspect these materials are in your home, seek professional help before remodeling. If you remodel, remember that careful clean-up is important to control exposure.

**Q: What is asbestos and why should I be concerned about it?**

A: Major sources of asbestos are deteriorating, damaged or disturbed insulation, fireproofing or acoustical materials, and floor tiles. You won't feel any immediate symptoms from excessive asbestos exposure, but there is the long-term risk of chest and abdominal cancers and lung disease. Smokers are at higher risk of developing asbestos-induced lung cancer.

**Q: Why should I be concerned about lead?**

A: Young children (up to about six years old) are especially at risk of unknowingly ingesting lead contaminated dust or paint chips. Small amounts of lead dust, ingested regularly, can cause delayed development, reading and learning problems, lowered IQ, hyperactivity and discipline problems. Larger doses can cause high blood pressure, anemia, and kidney and reproductive disorders in kids *and* adults. Lead accumulates in the body and its effects are irreversible.

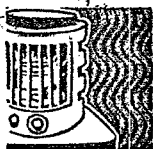
**Q: What is formaldehyde and why should I be concerned?**

A: Formaldehyde is often used as a preservative or as an adhesive in pressed wood products, such as paneling and particle-board, and furniture.

Formaldehyde causes eye, nose and throat irritations; wheezing and coughing; fatigue; skin rashes; headaches; loss of coordination; nausea; damage to liver, kidneys and the central nervous system; and severe allergic reactions. It has been linked to cancer.

**Q: What about other chemicals used in remodeling, such as paints, wood strippers and finishes, adhesives, waxes and cleaners?**

A: The products to watch for are those containing volatile organic compounds, which are organic solvents that easily evaporate into the air. Some may be flammable. Following are some of the compounds listed on product labels: petroleum distillates, mineral spirits, chlorinated solvents, carbon tetrachloride, methylene chloride, trichloroethane, toluene and formaldehyde. Other remodeling products can be a hazard if they are used improperly.



# Combustion Pollutants

To protect yourself and your family from combustion pollutants, you need to know whether you're at risk. Here are some common questions and answers.

## **Q: What are combustion pollutants?**

A: They include gases or particles that come from smoking and the burning of fuels — natural gas, propane, wood, oil, kerosene and coal. The resulting harmful gases include carbon monoxide, nitrogen dioxide, sulfur dioxide, particulates and excess water vapor.

## **Q: Why should I be concerned about them?**

A: Carbon monoxide, an odorless gas, can be fatal. Nitrogen dioxide can damage the respiratory tract and sulfur dioxide can irritate the eyes, nose and respiratory tract. Smoke and other particulates irritate the eyes, nose and throat, and can cause lung cancer. Too much water vapor can lead to moisture problems in the home, including the growth of mold.

## **Q: How do combustion pollutants get into the home?**

A: Combustion pollutants enter the home from a variety of sources. Any heating appliances that burn fuels — furnaces, boilers, water heaters, fireplaces, stoves, space heaters, ranges and clothes dryers — introduce combustion gases. These pollutants also are caused by tobacco smoking, automobile exhaust entering from a garage, and activities involving the use of internal combustion engines or burning, welding or soldering.

## **Q: What causes these gases to build to dangerous levels?**

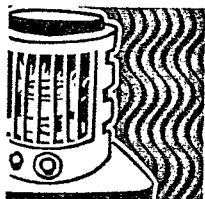
A: Harmful build-ups of these gases can occur when exhaust from combustion equipment is not properly vented to the outside of the home, combustion equipment is not in good working order and is not regularly inspected for safe operation, and a negative pressure balance exists between the inside and outside of the home. Tobacco smoking inside the home also contributes.

## **Q: What signs can help me determine if combustion gases are affecting my health?**

A: They may be the culprit if you feel bad only when you're inside the home and the symptoms disappear when you leave, or if more than one person in the home has similar symptoms. A noticeable increase in moisture problems can also be a sign of combustion pollutants in the home.

**Q: How can I reduce the risk from combustion gases?**

A: The most important practice is to keep all combustion equipment well-maintained and inspected for safety. Experts recommend having your combustion heating systems inspected by a trained professional every year. Such inspections should look for blocked openings to flues and chimneys, cracked or disconnected flue pipe, dirty filter, rust or cracks in the heat exchanger, soot or creosote build-up, and exhaust or gas odors. Also, always operate combustion equipment for its intended purpose and make sure it has been installed correctly. You might consider installing a carbon monoxide detector, which will alert you to dangerous levels of carbon monoxide. However, such a detector will not detect other combustion by-products that can still make you ill.



## Carbon Monoxide

**Q: What is carbon monoxide and why should I be concerned about it?**

A: Carbon monoxide is an odorless, colorless gas that can be fatal when breathed. It's sometimes difficult to determine if carbon monoxide is the culprit, because its symptoms are similar to flu and allergies. Low levels can cause nausea, dizziness, weakness and muscle ache. Higher doses can impair judgement, cause paralysis or coma, and death.

**Q: How does carbon monoxide get into the home?**

A: Carbon monoxide buildup can occur several ways: when flues or chimneys become blocked so exhaust cannot be vented to the outside; when a fuel burning furnace has a cracked or rusted heat exchanger, allowing combustion gases into the living spaces; when fuel-burning space heaters, ovens, ranges or grills are operated in the home without adequate ventilation; when car exhaust from an attached garage enters the home; when combustion equipment is not working properly and causes incomplete combustion; and when there's a negative pressure balance between the inside and outside of the home, preventing adequate venting of combustion gases.

**Q: What causes carbon monoxide to build to dangerous levels?**

A: Harmful build-ups of these gases can occur when: exhaust from combustion equipment is not vented to the outside of the home, and when combustion equipment is not in good working order and is not regularly inspected for safe operation.

Some homes may have a problem with "backdrafting." That's when the air



pressure inside the home is less than the air pressure outside, causing combustion by-products from furnaces, water heaters, fireplaces and similar equipment to spill back into the room rather than being vented outside. Backdrafting can also occur when natural draft appliance exhaust is pulled back into the house by mechanical ventilation — like a down-draft kitchen power vent.

**Q: Is there a way to detect if my home has carbon monoxide build-up?**

A: There are carbon monoxide detectors you can install, which will alert you to dangerous levels of carbon monoxide. It is important to choose and place a detector wisely and maintain it to assure accurate sensing of carbon monoxide.

**Q: What signs can help me determine if carbon monoxide is affecting my health?**

A: Carbon monoxide may be the problem if you feel bad only when you're inside the home and the symptoms gradually disappear after you have left, or if more than one person in the home has similar symptoms. Remember carbon monoxide related symptoms are similar to those of the flu.

**Q: How can I reduce the risk from carbon monoxide?**

A: The most important practice is to keep all combustion equipment well-maintained and inspected for safety. Experts recommend having your combustion heating systems inspected by a trained professional every year. Such inspections should look for blocked openings to flues and chimneys; cracked or disconnected flue pipe; signs of soot around openings in your furnace or boiler; rust or cracks in the heat exchanger; soot or creosote build-up; and exhaust or gas odors. Always operate combustion equipment for its intended purpose and make sure it has been installed correctly. Never use unvented combustion appliances indoors.



## Lead Dust

**Q: What is lead? What are the sources of lead?**

A: It's a metallic element that is widely dispersed in the environment. It was used in house paint until 1978, when it was banned. It was also widely used in gasoline, but has since been removed. Near major traffic corridors, soils may be contaminated from the long-term use of leaded gas. Also, water is a potential source of lead. This is usually from lead in solder, fixtures and piping in the home. There is no lead in a "lead" pencil!

**Q: Why should I be concerned about lead?**

A: Young children (up to about six years old) are especially at risk of ingesting lead contaminated dust or paint chips. Small amounts of lead dust, consumed regularly, can cause delayed development, reading and learning problems, lowered IQ, hyperactivity and discipline problems. Larger doses can cause high blood pressure, anemia, and kidney and reproductive disorders in both kids and adults. Lead accumulates in the body and its effects are irreversible.

**Q: How do I know if my children have been exposed to lead?**

A: If you live in an older home, your children may be at high risk. All children up to age six should be tested for lead in their blood. Ask your public health department about lead testing programs for children.

**Q: How do I know if my home has significant concentrations of lead?**

A: An estimated 57 million U.S. homes have at least some lead paint. Older homes are at greater risk. Prior to 1950, paint contained as much as 50 percent lead. Paint in good condition poses little risk. Paint that is peeling or on deteriorating surfaces is especially risky. Dust created from remodeling an older home can also be a source of lead.

Do-it-yourself test kits are available at home centers, paint stores and ceramic supply stores. Their sensitivity is limited though. Also, it may be difficult to get accurate readings on surfaces with multiple levels of paint. For more accurate information, have a professional detection service conduct a lead-based paint risk assessment.

**Q: Should I be concerned if my home has lead?**

A: Yes, especially if you have young children in your home. But, it's important to distinguish between the presence of lead paint and a lead paint hazard. Lead paint in good condition may not pose a hazard until sometime in the future—say, if you plan to scrape the paint or remodel. Then paint dust will pose a hazard.

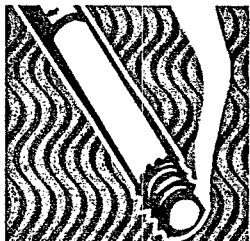
**Q: If lead is detected in my home, what should I do?**

A: The simplest way to control exposure to lead is through frequent damp mopping to control dust. (Vacuuming can disperse dust particles back into the room.) Pick up loose paint chips with duct tape. Frequent washing of your child's hands and toys will also reduce exposure. It's important not to sand or scrape leaded paint or do any other activities that generate dust.

Eliminating lead dust hazards is complex and should only be done by professionals. Measures include replacing windows and moldings, paint removal and covering surfaces with materials such as wallboard. Children should be removed until the site "clears" inspection.

**Q: Where can I get more information about lead?**

A: Contact the National Lead Information Center (1-800-424-5323) for answers to specific questions, or its hotline (1-800-532-3394) for print materials, including an Environmental Protection Agency booklet titled "Protect Your Family from Lead in Your Home."



## Environmental Tobacco Smoke

Here are some common questions and answers about secondhand smoke also known as environmental tobacco smoke (ETS).

**Q: What is secondhand smoke?**

A: Secondhand smoke is a mixture of the smoke given off by the burning end of a cigarette, pipe or cigar, and the smoke exhaled from the lungs of smokers. This mixture contains more than 4,000 substances, more than 40 of which are known to cause cancer in humans or animals and many of which are strong irritants. Exposure to secondhand smoke is called involuntary smoking, or passive smoking.

**Q: How does secondhand smoke affect my health?**

A: Secondhand smoke has been classified by the U.S. Environmental Protection Agency (EPA) as a known cause of lung cancer in humans (Group A carcinogen). EPA estimates that ETS causes approximately 3,000 lung cancer deaths in nonsmokers each year.

**Q: What about the risks to children?**

A: Secondhand smoke is a serious health risk to children. EPA estimates that passive smoking is responsible for between 150,000 and 300,000 lower respiratory tract infections in infants and children under 18 months of age annually, resulting in between 7,500 and 15,000 hospitalizations each year. Children exposed to secondhand smoke are also more likely to have reduced lung function and symptoms of respiratory irritation like cough, excess phlegm, and wheeze.

Passive smoking can lead to buildup of fluid in the middle ear, the most common cause of hospitalization of children for an operation. Asthmatic chil-

dren are especially at risk. EPA estimates that exposure to secondhand smoke increases the number of episodes and severity of symptoms in hundreds of thousands of asthmatic children. EPA estimates that between 200,000 and 1,000,000 asthmatic children have their condition made worse by exposure to secondhand smoke. Passive smoking may also cause thousands of non-asthmatic children to develop the condition each year.

**Q: What can I do to reduce my family's risk from ETS?**

A: Do not smoke in your home or permit others to do so. If a family member insists on smoking indoors, increase ventilation in the area where smoking takes place. Open windows or use exhaust fans. Do not smoke if children are present, especially infants and toddlers. They are particularly susceptible to the effects of passive smoking.

**Q: Where can I get more information?**

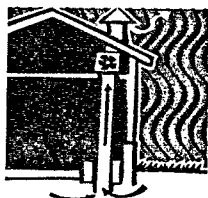
A: Contact your local Extension Office, your state department of health, or the National Indoor Air Quality Information Clearinghouse (1-800-438-4318). Other agencies with information are:

Office on Smoking and Health, Centers for Disease Control and Prevention: 404-488-5705

National Cancer Institute: 800-4-CANCER

National Heart, Lung, and Blood Institute: 301-951-3260

National Institute for Occupational Safety and Health: 1-800-35-NIOSH



## Radon

**Q: Why should I be concerned about radon?**

A: Exposure to radon can increase your chances of getting lung cancer. Scientists are more certain about radon risks than risks from most other cancer-causing substances. Smoking combined with radon exposure is an especially dangerous health risk.

**Q: How does radon affect my health?**

A: Radon gas decays into radioactive particles that can get trapped in your lungs when you breathe. These particles release bursts of energy that can damage lung tissue and lead to lung cancer.

**Q: What is radon? Where does it come from?**

A: Radon is an odorless radioactive gas that results from the breakdown of uranium. Uranium is present in most of the soil and rock around the world. It is typically concentrated in areas with lots of granite, shale, phosphate and pitchblende.

**Q: How does radon enter your home?**

A: Because radon is a gas, it can leak into your house through the basement or crawl space — via adjacent or exposed soil and rock — or through well water. Some building materials such as natural stone or rock can contain and emit radon. Radon can also be carried into your house through natural gas.

**Q: How do I know if my home has significant concentrations of radon?**

A: The only way to know is to have your home tested. You may be able to hire a radon monitoring service — check your yellow pages under “radon” or “labs.” You can also monitor radon levels yourself by using an alpha track detector, which takes at least a month — up to a year for more accurate readings — to determine average radon concentration. Such detectors cost about \$20-\$25 per kit which usually include postage and reporting on test results. Because these long-term tests are exposed to radon for a longer period, they are generally considered more valid than the short-term carbon detector tests. These can be conducted in two to seven days and cost \$10-\$20 per kit.



## Excessive Formaldehyde

**Q: What is formaldehyde?**

A: It is a chemical that is released into the air as a pungent gas. It has a number of useful properties: It's a good preservative and makes an excellent adhesive. Therefore, it is used widely in the building and furnishings industries. It is also found in small amounts in some textiles as an anti-wrinkle agent.

**Q: Why should I be concerned about formaldehyde?**

A: It is a strong irritant that causes watery eyes and in low doses, causes burning sensations in the eyes, nose and throat. Wheezing and coughing, fatigue, skin rashes, headaches, loss of coordination and nausea are other symptoms. Larger doses can cause asthma attacks as well as damage to the liver, kidneys and the central nervous system. Some people are highly sensitive and react to formaldehyde concentrations that don't bother most people.

Formaldehyde has been shown to cause cancer in laboratory animals, but there is limited evidence that it causes cancer in humans.

**Q: What are the major sources of formaldehyde?**

A: Particleboard is the major contributor of formaldehyde to the home environment. The culprit is the adhesive, urea formaldehyde, which can break down, releasing the formaldehyde. Phenol formaldehyde (used in exterior panels) does not present problems. Some particleboard is now manufactured with reduced formaldehyde.

Other sources include interior plywood, veneered or laminated furniture and cabinets, some professionally applied furniture and floor finishes, paneling, permanent press fabrics (some drapes), combustion products and cosmetics.

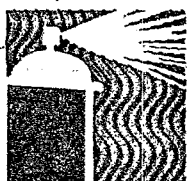
**Q: How can I detect whether my home has significant concentrations of formaldehyde?**

A: You may be able to detect it by its odor. Also, environmental testing firms, listed in the yellow pages of the phone directory, should be able to test for formaldehyde levels. Since such tests are costly, you should learn whether your home has possible sources of formaldehyde. Also, do-it-yourself test kits are available, but there is some question about their accuracy.

**Q: What can I do to reduce formaldehyde problems?**

A: Formaldehyde cannot penetrate plastic laminate and is at least partly blocked by coatings. Varnishes and special formaldehyde sealants are also available. Apply these coatings to all exposed edges and surfaces, such as the undersides of countertops, cabinet interiors and drawers.

High humidity and elevated temperatures cause formaldehyde release, so you might want to control humidity through air conditioning and dehumidifiers. Also, increase ventilation, particularly after bringing new sources of formaldehyde into the home. When remodeling and in new construction, select low formaldehyde materials.



# Safely Choose and Use Household Products

The unsafe use of many common household products can cause many undesirable health effects. To protect yourself and your family, read on.

**Q: What are some of the products I should be aware of?**

A: Solvents, paints, paint strippers, wood preservatives, aerosol sprays, moth repellents, air fresheners, stored fuels, automotive products, hobby supplies, pesticides and some cleaners and disinfectants.

**Q: What are the particular ingredients that I should be concerned about?**

A: The products to watch for are those containing volatile organic compounds, which are organic solvents that easily evaporate into the air. Some may be flammable. Following are some of the compounds listed on product labels: petroleum distillates, mineral spirits, chlorinated solvents, carbon tetrachloride, methylene chloride, trichloroethane, toluene and formaldehyde. Other household product ingredients can also be a hazard if they are used improperly.

**Q: What are some of the health effects?**

A: Short-term effects include eye, nose and throat irritation, and headaches. Long-term exposure can cause loss of coordination; nausea; and damage to liver, kidneys and the central nervous system. Some organics can cause cancer in animals and are suspected of causing cancer in humans.

**Q: What are some ways I can minimize potential health problems?**

A: First, read the labels of products you are considering buying. Note the product's ingredients and beware of any warnings of its use. Always use household products only for their intended purpose and according to the manufacturer's instructions. Use the product in a well-ventilated area. Choose products that are packaged to reduce the chance of spills, leaks and child tampering. Also, keep household products in their original containers so that safety information and directions for use are always with the product.

**Q: Are there ways I can reduce my need for these products?**

A: Yes, by practicing preventative maintenance. Quickly attend to spills and stains. Remove food wastes promptly. Also, control excess moisture (such as standing water from air conditioner drains or refrigerator drip pans) and fix leaks, drips and seepage problems.

You might consider using "natural" or "alternative" products, but these products also have pollution potential if not used correctly. Products may be labeled "environmentally safe," but any product that evaporates into the air has the potential to be an indoor air pollutant, depending on the quantity used, the method of use, the product's toxicity and the sensitivity of the user.



# Healthy Indoor Air for America's Homes

**Healthy Indoor Air for America's Homes** is a national consumer education program concerned with improving the quality of indoor air in homes. Designed for the community educator, the program offers a manual including ten comprehensive training modules on residential indoor air quality issues, marketing and media helps, consumer video presentations, evaluation tools and implementation ideas. A program manager is available in most states who can assist you with the program.

For more information, contact the Montana State University Extension Service Housing Program at 406-994-3451, Fax: 406-994-5417, or visit our web site at [www.montana.edu/wwwcxair](http://www.montana.edu/wwwcxair)

**To order an additional free copy of this booklet, contact:**  
The National Center for Environmental Publications and Information  
(NCEPI) at 1-800-490-9198 OR write to:  
The Public Document Distribution Center, 31451 United Avenue,  
Pueblo, CO 81001. Request item #636-E.

**Additional sources of information and publications  
on home indoor air quality:**

County Extension Office: check your county government telephone listing

EPA Indoor Air Quality Information Clearinghouse: 1-800-438-4318

National Lead Information Center: 1-800-424-5323

Consumer Product Safety Commission: 1-800-638-CPSC

A partnership program of



United States Environmental Protection Agency  
Indoor Environments Division



Housing Program



United States Department of Agriculture  
Cooperative State Research, Education and Extension Service

**Healthy Indoor Air for America's Homes website:**  
**[www.montana.edu/wwwcxair](http://www.montana.edu/wwwcxair)**